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CITY AND COUNTY OF SAN FRANCISCO

DEPARTMENT OF THE ENVIRONMENT

ANNUAL REPORT
SEPTEMBER 1998



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Commission Established by New City Charter

When the City of San Francisco adopted a new city charter in 1995, it established a new Commission on the Environment. The first commission was appointed by Mayor Willie L. Brown, Jr. in October, 1996.

The Commission's mission is to improve, enhance, and preserve the environment and to promote San Francisco's long-term environmental sustainability as set forth in Section 4.118 of the City Charter.

There are seven commissioners appointed by the mayor, each of whom serves a four-year term, at the mayor's pleasure.

- Francesca Vietor, President
- Steven Krefting, Vice President
- Anne Lee Eng
- Rebecca Evans
- Paul Okamoto
- Linda Richardson
- Christine H. Russell

The commission sets policy for a new Department of the Environment. In addition, it:

- Has the authority to review and make recommendations on any policy proposed for adoption by any City agency regarding conformity with the long-term plan for environmental sustainability, except for those regarding building and land use;
- May investigate and make recommendations to all City agencies related to operations and functions, such as solid waste management, recycling, energy conservation, natural resource conservation, environmental inspections, toxics, urban forestry and natural

resources, habitat restoration, and hazardous materials; and

- Conducts public education and outreach to the community on environmental issues.



Initiation of the Department of the Environment

The new agency was created to:

- Ensure that **environmental policy-making and practice is done in the context of long-term planning** on environmental issues;
- Create a center within the city to perform long-term sustainability planning;
- Increase visibility of local environmental issues in San Francisco;
- Coordinate the work of various city environmental agencies for increased effectiveness;
- Enhance the impact of existing programs (and push them further toward sustainability than they might otherwise go);
- Create a central focus for the public's interaction with the City on environmental issues; and
- Establish a body that could represent and publicize San Francisco's environmental efforts in regional, national and international contexts.



Activities of Commission
During Its First Eighteen
Months

Hearings on Environmental Topics

As part of its outreach role, the commission has presented a number of informational hearings on environmental topics. These have included:

Air quality
Biodiversity
Brownfields

Energy
Environmental health
Food policy
Integrated pest management
Recycling
Resource efficiency
Sustainable development
Toxics
Transportation
Water and wastewater, and
Wetlands

Resolutions Passed on Environmental Issues

In its policy-making role, the commission has addressed the following issues by resolution:

- Urging implementation of the city's bicycle plan
- Encouraging a switch to compressed natural gas buses by the Municipal Railway
- Urging study of municipal purchase of PG&E power plants
- Urging elimination of wastewater-related odors in Bayview-Hunters Point neighborhood
- Urging study of alternative approaches to wastewater collection and treatment
- Opposing the proposed Ward Valley Nuclear Dumpsite
- Banning local use of personal water craft for reasons of safety and water pollution
- Proposing restrictions on municipal use of toxic cleaners and sanitizers.

The Commission is particularly proud of the outcome of its participation in the civic discussion on the sale of two power plants in the southeast sector of San Francisco. The Commission's urging of the Board to encourage the Public Utilities Commission to revisit the issue appears to have been a key factor in what eventually became the city's decision to acquire and close down these polluting plants.

San Francisco Department of the Environment Commissioner's Office 1997

Beryl Magilavy served as the first director of the Department of the Environment, after having served as the first president of the Commission.

The Department's duties are to:

- Produce and regularly update an **assessment of SF's environmental condition**;
- Produce and regularly update **plans for the long-term environmental sustainability** of San Francisco;
- Conduct **public education and outreach** to the community on environmental issues; and
- **Manage the environmental programs, duties, and functions** assigned to it.

The two primary programs of the department of the environment are oversight of the city's integrated pest management program and a collaborative effort to set up a municipal program to reduce the environmental impact of municipal buildings—a high-performance building program.

ASBESTOS PROGRAM

The Sustainability Plan

What is Sustainability?

Sustainability is a word that has not yet come into popular use. The idea it represents encompasses an urgent need, recognized by a growing number of people around the world, to provide for a positive common future that considers the rights to livelihood of future generations and other living beings on the planet.

Sustainability planning builds a strategy for ecological, community and economic development that will provide for the needs

of the present without sacrificing the ability of future generations and the natural environment to meet their own needs.

Overview of the Plan

The City and County of San Francisco has one of the most advanced sustainable planning efforts in the United States. Over the last year, thousands of copies have been distributed to San Franciscans and others from around the world. Hundreds more have downloaded the plan from the Department's web site. San Francisco's sustainability plan has been discussed at meetings from Newcastle, Australia to New York City, and news coverage has been international.

San Francisco has determined that it is in the best interests of its residents to move to a more long-term strategy for its municipal planning. Concern about the **global environment**—issues such as climate change, loss of biodiversity, depletion of resources, and the effect of chemicals on human health, particularly with respect to cancer and reproductive abnormalities—was part of the impetus for the City's sustainability plan.

Another important goal of a sustainable society is to create a sustainable **economy** that provides a good quality of life in the long term for everyone in San Francisco, while contributing minimal impact on the natural world.

Finally, there was a realization that the best way to reach the City's goals was to set out a specific strategy and a means to measure progress.

Approval by the San Francisco Board of Supervisors

In July, 1997, the San Francisco Board of Supervisors approved the Sustainability Plan for the City of San Francisco, establishing sustainable development as a fundamental goal of municipal public policy, and approving the goals and objectives set out in the plan as ends that the City will strive to attain.

San Francisco's Commission on the Environment and the Department of the Environment are among the first municipal bodies in the country dedicated to planning for long-term environmental sustainability with significant participation from a broad cross-section of businesses, institutions, community-based organizations, and private individuals.

The plan covers a range of topics: air quality; biodiversity; energy, ozone depletion and climate change; food and agriculture; hazardous materials; human health; parks, open space and street trees; solid waste; transportation; and water and wastewater.

Implementation of parts of the plan are already underway. Activities of the Department of the Environment include a new municipal pesticide-reduction program and design of a green-building ordinance. Serious discussions are currently taking place on improvement of bicycle access in our congested streets. Other city agencies are stepping up their efforts on recycling, water and energy conservation, and other areas.

Achievement of the goals set out in the Sustainability Plan for the City of San Francisco is still a long way off, but with the road-map provided by the plan, we can focus our effort toward a more livable common future.

Copies of the *Sustainability Plan* are available at the Department of the Environment (554-6390), or at its website: <http://www.ci.sf.ca.us/environment>.

The Community Planning Process

The sustainability plan was the result of a community collaboration made up of over 350 institutions and individuals, which drew heavily from city agency representatives, local businesses, the environmental advocacy community, and local universities.

A sustainable society meets the needs of the present without sacrificing the ability of future generations and non-human forms of life to meet their own needs.

There were extensive public hearings in June, 1996, and additional public hearings before three City bodies: an advisory commission on the environment (now dissolved), the current Commission on the Environment, and the San Francisco Board of Supervisors.

Structure of the Plan

The plan sets out broad social goals, 5-year objectives and objectives that would need to be achieved in order to create a truly sustainable society. It proposes actions that city government, the private sector, and individuals can take to achieve the goals and objectives. The Board of Supervisors has not committed the City to perform all the actions sketched out in the plan; those actions serve as proposals for further development and public comment.

Of the plan's fifteen topic areas, ten address specific environmental issues, and five are broader in scope and cover many topics (such as public information and education). A separate section lists numerical indicators for all topic areas. The indicators were designed to create a base of objective information on local conditions—ongoing measurements that:

- Are obvious in what is being measured,
- Can be found at low cost given the current information-gathering machinery,
- Clearly indicate a trend toward or away from sustainability, and
- Are understandable to everyone and easily presented in the media.

A Sample of Objectives from the Plan

In its final version, the plan is approximately 150 pages long. It is impossible to fairly summarize; it contains hundreds of objectives and actions, and any selection imposes the values of the person excerpting the proposals. However, for the purpose of describing the plan to those unfamiliar with

it, following is a selection of some of the objectives San Francisco will be trying to reach within the next five years.

Air Quality

All municipal building projects meet specifications that incorporate air-quality concerns (including specifications for the use of integrated pest management).

Vehicle-miles traveled in private automobiles have been reduced by 10%.

Biodiversity

Invasive plant species are continuously controlled in natural areas.

The collection and organization of a biological inventory of the city's natural areas and biodiversity has begun.

Energy, Climate Change and Ozone Depletion

Each building's energy characteristics (such as energy use and insulation) are disclosed when it is listed for sale.

CFC-based cooling and refrigeration equipment in San Francisco has been reduced by 50%.

Food and Agriculture

Three additional certified farmers' markets have been established in locations close to San Francisco residential neighborhoods.

All new housing projects have a dedicated amount of edible-garden space.

Hazardous Materials

The total amount of hazardous materials stored in San Francisco has been reduced by 10% from 1995 levels.

An environmental safety program has been created that is focused on educating groups identified as more at-risk either because of their characteristics (for instance, children and people with suppressed immune systems) or their location (for instance, adjacent to a contaminated site).

Human Health

Basic immunization among children under two years of age has increased to at least 90%. Historical and existing environmental contamination has been identified.

Parks, Open Spaces and Streetscapes

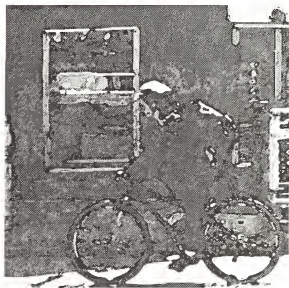
Five recreational facilities in previously under-served neighborhoods have been added and others have been improved.

Maps showing all the natural habitat areas in San Francisco have been established.

Solid Waste

City government diverts 60% of its current waste generation.

The salvage and reuse of construction and demolition materials has increased.



Transportation

An increase in the total number of person-trips into and within the City will be accommodated while decreasing the number of single-occupancy vehicles.

Agreement from the nine counties in the Bay Area on improving regional connections through an integrated public-transit-oriented regional transportation plan has been achieved.

Water and Wastewater

Tax credits and financial incentives are in place for water reductions in homes and businesses.

A lake management plan has been implemented.



Economy and Economic Development

A sustainable tourism industry has been created in San Francisco (with minimized impacts on the environment and the City).

A citywide network of neighborhood boards has been established.

Environmental Justice

Residents of poor communities are trained in the basic and technical job skills required by new and existing sustainable businesses and industries.

Decision-making bodies and processes have adequate and direct representation of affected communities.

Municipal Expenditures

A long-term budgeting policy promoting multi-year funding support and life-cycle costing (full-cost accounting) for capital expenditures has been established.

All departments have developed a maintenance program that sustains city parks, buildings, streets and other public facilities.

Public Information and Education

An integrated environmental curriculum is in use in all public elementary schools in San Francisco.

An accessible clearinghouse of environmental information promotes volunteer networking among organizations and individuals.

Risk Management (Activities of High Environmental Risk)

Waterway hazards that increase the chance of oil spills have been identified and their mitigation is underway.

Legislation that mandates fire safety education and training programs has been passed.

Indicators include such items as:

Number of people going to clinics for respiratory problems.

Energy cost per tax dollar.

Tons of waste landfilled annually.

Difference between the highest neighborhood unemployment rate and the full employment rate.

The Global Context

San Francisco joins the first rank of cities around the world in implementing *Agenda 21*, an international agreement adopted by the United Nations Conference on

Environment and Development in June, 1992. Signed by the US and most of the world's other countries, the agreement creates a global action plan for sustainable development.

The agreement recognizes that global sustainability cannot be reached without aggressive change at the local level. In Chapter 28, it states:

Because so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities, the participation and cooperation of local authorities will be a determining factor in fulfilling its objectives. Local authorities construct, operate, and maintain economic, social, and environmental infrastructure, oversee planning processes, establish local environmental policies and regulations, and assist in implementing national and sub-national environmental policies. As the level of governance closest to the people, they play a vital role in educating, mobilizing, and responding to the public to promote sustainable development.

The chapter sets out a goal of attaining a sustainability planning process through community consultation by 1996. San Francisco is proud to be one of the very few US cities to have achieved that goal.

As a member of the International Council of Local Environmental Initiatives (ICLEI), San Francisco joins over 300 other municipalities, from Cajamarca, Peru to Lisbon, Portugal and Kyoto City, Japan in drafting and implementing local sustainability plans. In some countries, such as Denmark, Finland, Sweden, Germany, the United Kingdom, Netherlands, Japan, Australia, and New Zealand, nearly all local authorities have adopted or are in the process of adopting sustainability plans.

Through ICLEI, San Francisco's Department of the Environment works in collaboration with representatives of other cities around the world to refine our programs, learn from

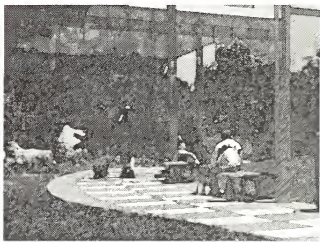
the experience of other cities, and show the way for others to follow in areas in which we are ahead.

Integrated Pest Management Plan

Overview of the Problem

Early in 1996, members of the environmental activist community, spearheaded by Pesticide Watch, raised concern about the amount of dangerous pesticide used by the City of San Francisco—part of a growing problem in California.

Pesticide use in public spaces in the urban environment creates a significant public health threat, particularly to children. Children are more vulnerable to the impacts of pesticides because they are likely to be exposed more often, through behavior like putting their hands in their mouths and rolling around on the grass. They have small, rapidly developing bodies on which chemicals have a greater impact than on adults.



Overview of the IPM Program

In response to these concerns, San Francisco has passed what we think is the strongest program in the country—possibly in the world—to eliminate the use of unnecessary pesticides on city property. Chapter 39 of the Administrative Code, the Integrated Pest Management (IPM)



Program, bans the use of large classes of toxic pesticides, and substitutes preventive measures and use of less dangerous pesticides.

By the year 2000, San Francisco city government will have phased out use of all pesticides other than those commonly used as part of an IPM program, such as mild soaps and non-reactive dusts. Businesses that lease city property will follow the same rules a year later.

There are exemptions in the ordinance for pesticides used in the provision of health-care services; for drinking water, wastewater and swimming pools; and for emergency

use when there is no viable less-toxic alternative.

Shared Responsibility with the Department of Agriculture and Others

The Commission on the Environment and the Department of the Environment work jointly with the Department of Agriculture, the private company that handles much of the City's pest management work, and the Purchaser's Office to help the city's 70 departments make a radical switch in their pest management practices. Over the last 18 months, the Department has established systems to:

- Provide general oversight for the IPM program, reviewing the success as measured by several milestones, and coordinating with the Department of Agriculture to modify the program where implementation is impeded;
- Review the implementation plans required to be submitted by every department and to assist them in making their plans comply with the law;
- Assist the Department of Agriculture with the task of educating all agencies about pest deterrence techniques;
- Consider requests for exemptions for particular chemicals for particular uses; and
- Regularly report to the Board of Supervisors regarding the success of the program.

Program in Review

San Francisco's pesticide practices have come a long way in the last eighteen months. All of the most dangerous pesticides were banned for city use at the beginning of 1997, and for tenants on city property at the beginning of 1998. At the beginning of 1998, pesticides at the next level of danger were banned for city use as well.

Citywide records of pesticide use were not prepared prior to passage of the IPM

ordinance, so there is too little historical data to assess exactly how much less is being used. We know that the drop is significant, however, which should greatly reduce the health risk to the public and the environment.

Switching to IPM is a lot more than just refraining from using the most dangerous pesticides, however. It requires a whole new way of thinking on the part of many people: gardeners, facilities managers, custodians, pest management contractors, and even office staff, because the emphasis shifts from getting rid of pests to—as much as possible—preventing their becoming a nuisance in the first place. For office staff and building managers, this means sanitation and facilities maintenance. For people involved in landscape management, this means a huge education process in approaches such as mulching, hand-weeding or mechanical means of killing weeds, natural predators, and the substitution of plants that are most suitable to San Francisco's climate, making them resistant to pest infestation.

For a city with 35,000 employees and nearly 70 separate departments, making the shift to IPM has been a daunting challenge. Here is an overview of progress:

Program Management

The city-wide nature of the IPM program makes coordination essential. Early on in the process, the Department of Agriculture organized an interagency IPM working group, which has been key to successful implementation of the plan. The Department of the Environment is a major participant in this working group, and addresses overall program issues that don't fall logically within the responsibility of any particular agency. These issues have included budgets, human resources, citywide professional services contract review, and data collection protocols, among others.

Education

Program Guidance: The Department of the Environment produced a general guidance document covering details of the

entire IPM program and program compliance by city agencies. It was completed and distributed in fall of 1997 and has been requested for reference by cities around the country.

Department-Head Training: In July, Mayor Brown sponsored a training on the compliance requirements for the IPM program for department heads and executive staff, which was presented by the Department of the Environment.

Staff Training: The Department of Agriculture, separately and with the Recreation and Park Department, have produced a number of training sessions, both for technical staff and for general office staff. Some of the larger agencies, such as the airport, have begun training janitorial staff as well. Training materials have had to be developed from scratch; there is much more to be done to train all appropriate municipal employees. The Department of the Environment has assisted in development of material for these trainings.

Work on a "train the trainer" program has begun.

Technical Information via the Web: The Department of Agriculture is working on a web site that will not only provide information on IPM approaches to insect and weed management, but will allow city staff people to consult with one another on pest management practices, tools, and products.

IPM Consulting: The Department of the Environment's IPM Program Coordinator joins the Department of Agriculture's staff in providing special assistance to various city departments with pest management challenges.

Technical Information: The Department of the Environment's IPM Program Coordinator has produced nearly 20 technical reference sheets on IPM approaches to specific pests. These references will be used in training and posted on the IPM web site.

Data Collection: A major new feature of the IPM legislation is the requirement for

citywide collection of information on pesticide use levels, alternative approaches used, and other program data. The department has been working closely with the Department of Agriculture, which has front-line responsibility for data collection, to assist in the development of automated data-collection systems.

Compliance: With considerable assistance from Department of the Environment staff, nearly all city departments either have submitted the IPM implementation plans required of them or are working toward doing so. These implementation plans designate responsible parties in each agency for pest monitoring and required reporting, and the approaches the agency will take to reduce the possibility of pest infestation as well as managing pests once they appear.

Contract Changes: Contracts for pest management services had to be modified to include a different approach to treating pest problems. The department worked closely with the City Purchaser to educate them on IPM, and to help craft a new citywide contract.

In addition, new and renewed property leases also needed modification to ensure that tenants are aware of their responsibility to cease the use of banned pesticides and to use integrated pest management techniques. These leases are gradually being modified city-wide.

Exemption Request Review: Over the last year, there have been ten requests for limited-time exemptions to the pesticide use bans. The Department's IPM program coordinator investigates the circumstances around each proposed use of a banned substance, researches the availability of less-toxic alternative approaches for pest management, and makes a recommendation to the Commission based on whether the department:

- Made a good-faith effort to find alternatives to the banned pesticide;
- Demonstrated that effective, economic alternatives to the banned pesticide do not exist for the particular use; and
- Developed a reasonable plan for investigating alternatives to the banned pesticide during the exemption period.

Of the ten requests, nine were approved by the Commission on the Environment.

Anti-Microbial Study: Antimicrobials are products that are registered with the US EPA to kill microbes, used to destroy or suppress the growth of harmful microorganisms such as bacteria, fungi, and viruses on inanimate objects and surfaces. They were temporarily exempted from the Integrated Pest Management Ordinance to give city staff more time to examine the potential impact of reducing their use.



Department of the Environment staff examined the scope of antimicrobial use by the city and consulted with experts on the impact of limiting antimicrobials. Acting on its recommendations, in June, the Commission forwarded to the Board of Supervisors a recommendation that antimicrobials *not* be limited for the provision of health care or for use in drinking water plants; wastewater treatment facilities; swimming pools; facility heating, ventilation and air conditioning (HVAC) cooling water systems; and public fountains. For all other circumstances, the Commission recommended banning general use of antimicrobials classified as Category I (most toxic) by the EPA—with exemptions if necessary—and setting minimized toxicity as a policy goal. They recommended creating expertise in the Purchaser's office for ongoing evaluation of the remaining, less toxic antimicrobials. Supervisor Katz has requested the City Attorney's office to draft legislation embodying these changes into the ordinance.

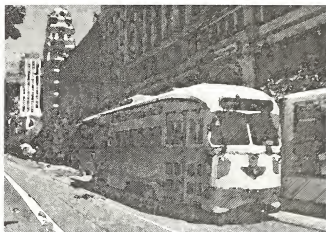
High-Performance Buildings Ordinance

Need for the Ordinance: According to WorldWatch Institute, construction, demolition and operation of buildings collectively consume up to 40% of the earth's energy and other natural resources. New design practices, technology, and materials can significantly reduce the resources used in the construction and operation of buildings and their cost of operation.

Environmental and Human Health

Benefits: The potential environmental benefits of high-performance building design are enormous. A very few examples:

- The U.S. Department of Energy has shown that passive solar buildings—those that allow daylight, heat and air flow into a building only when beneficial—use 47 percent less energy than conventional new buildings and 60 percent less than comparable older buildings.ⁱ



- Water-efficient appliances and fixtures, behavioral changes, and changes in irrigation methods can reduce water consumption by up to 30 percent or more.ⁱⁱ
- The City of Portland was able to recycle nearly all the construction and demolition debris from a demolished stadium, including 1,300 tons of wood, 29 tons of cardboard, and 1,000 tons of metal. These materials were recycled back to productive life, instead of using up space in a landfill.ⁱⁱⁱ
- Using interior fabrics and finishes that are low emitters of particles and volatile organic compounds (VOCs) can eliminate unnecessary health problems for building occupants who inhale the emissions, and can reduce the building's impact on air quality and damage to the earth's atmosphere.^{iv}

Money Savings: The City of San Diego's Ridgehaven green-building pilot operates at a year-round average energy use of nine kilowatt-hours per square foot, twice as efficient as the State of California Title 24 standard. The building has a high level of tenant satisfaction with ambient light and temperature levels, computers are adequately cooled, and other systems function effectively. The building works—with an estimated energy savings for the city of \$660,000 over ten years.^v New York City anticipates operating cost savings of 31 – 38% for a new library built with better-than-State-standard green building features.^{vi} The Portland stadium recycling effort mentioned above didn't cost extra. It actually saved the project money



overall—\$186,000 compared to what the city would have paid without construction and demolition debris recycling.^{vii}

Worker Productivity: Several studies have suggested that a healthy work environment boosts productivity about 10 percent, by reducing the number of sick days taken off and improving people's attitudes. If the average worker costs \$40,000 a year and occupies about 200 square feet of space, that means the employer's cost is about \$200 per square foot per person. A 10 percent increase in productivity would produce a \$20-per-square-foot increase in rental value.^{viii}

Collaboration with Other Agencies: New legislation shortly to be introduced by San Francisco Supervisor Tom Ammiano will lay the foundation for the City to improve the energy and other resource attributes of its public facilities construction programs. The legislation is the result of work of an interagency task force led by the Department of the Environment. Participating task force agencies are the PUC's Bureau of Energy Conservation and Water Department Customer Service Bureau, DPW's Bureaus of Architecture and Building Construction, and the Solid Waste Management Program. Anthony Bernheim,

AIA and David Gottfried, green building experts in private practice in San Francisco, participated as *pro bono* advisors.

Overview of the Proposal: The proposal is still in draft form, but we anticipate its primary features will be:

Pilot Program

A pilot program will serve as a test-bed for future performance standards for all municipal buildings.

- The City's Bureau of Architecture (BoA) will design 10 high-performance buildings over the next two to three years, working in collaboration with client city agencies (15 agencies will be asked to designate potential projects) and a special multi-disciplinary task force.
- As they work through the pilot projects, BoA will consult with the task force to develop high-performance design guidelines for all future municipal construction, and will produce an approach to assess the environmental and economic benefits of green building features.
- A process will be put in place to ensure that mechanical systems installed in the pilot public buildings operate as efficiently as they were designed to operate—the designer must ensure that performance matches the systems' design goals. (This process is called *commissioning*.)

Changes to be Made in Municipal Construction Right Away

Even as the pilot program is getting started, if the legislation passes, some positive changes will be made right away.

- Construction and demolition debris from municipal construction projects will be recycled.

- New public buildings and existing buildings that are remodeled will provide enough space for recycling by the building's users.
- Over a period of years, toilets and shower-heads in municipal facilities will be converted to low-flow.
- Exit signs, fluorescent fixtures, and exterior light fixtures will be gradually converted to more energy-conserving technology.
- Mercury-containing fluorescent light tubes removed from public buildings will be recycled.
- All public facilities managers will address indoor air quality issues with a cleaning and maintenance plan.
- Construction practices will be changed to reduce the chance of fungus growing in wall board and ventilation ducts (a major cause of Legionnaire's disease and "sick building syndrome").

High-Performance Building Program

The legislation proposes that overall management of the program and

Environment. These staff people will oversee the development of the program and assess its ongoing impact. Among their responsibilities will be to:

- Develop and oversee a training program on high-performance building design for city department heads, architects, engineers, construction managers and building managers;
- Coordinate city agencies having expertise in relevant areas, specifically working with the Bureau of Architecture's pilot program; and
- Provide information to the general public to encourage the adoption of high-performance building guidelines in the private sector.

What's Happening Elsewhere

The proposed new high-performance building ordinance brings San Francisco into the company of many other cities around the world that are making a more responsible use of resources in their built environment. Cities as diverse as New York City; Austin, Texas; and Sydney, Australia have made huge strides toward designing and building structures that provide developers, whether public or private, with more bang for the buck in the long run through energy



coordination of environmental city agencies will be located in a new high-performance building program in the Department of the

conservation, energy "generation," minimized water use, indoor air quality, and other features. Along this coast, San



Francisco will join San Diego, San Jose, Portland, Seattle and Vancouver in focusing on high-performance building.

Public Outreach

Guide to San Francisco Environmental Services: The department has issued a completely revised and updated version of the *Guide to San Francisco Environmental Services*. This booklet provides a one-stop reference to city government and non-profit services by environmental topic and includes a cross-reference and answers to commonly asked questions. The guide is available from the office and is distributed by the San Francisco Public Library.

Web Site: Web-surfers can now find information on integrated pest management, the text of San Francisco's Sustainability Plan, Commission on the Environment updates and more on the department's web site: <http://www.ci.sf.ca.us/environment>.

Presentations and Community

Participation: Staff members provided information to the general public on sustainability and integrated pest management at the Chinatown Earth Day Festival and the San Francisco Garden Show. The director has been a featured speaker on urban sustainability and department activities at the Pathways to Sustainability Conference in Newcastle, Australia; the Globe Conference in Vancouver, Canada; an all-day series of meetings with elected officials and staff of the City of Seattle; and locally for the American Institute of Architects, the American Planning Association, the Chamber of Commerce, the Commonwealth Club, and others.

Sustainability Fact-Sheets: The first two in an anticipated series of sustainability fact sheets, on sustainable economic development and biodiversity, are available from the department offices and are distributed at public events.

IPM Information Sheet for the General

Public: Integrated Pest Management is a new approach to pest management both for the City of San Francisco and for most members of the public. The department has published 14 pest fact sheets that provide, in a compact format, a user's guide to managing specific pests with a minimum of toxic chemical use.

Expert Advice to the Board of

Supervisors: Throughout the year, the department provides expert advice to other agencies and members of the Board on developing new programs and legislation. Agency staff have participated in inter-agency discussions on decreasing air pollution by the city's vehicle fleet, toxics use minimization, bicycle access, increasing development of brownfields in the city, increasing the recycled content of city purchases and the recycling of waste from city offices.

Represent San Francisco in National and International Environmental Contexts:

The department director has met with representatives of Taiwan, Japan, Sweden, and New Zealand, and many US and foreign cities who visit San Francisco to find out about our environmental programs and share their experience. We serve as the primary point of contact with the city for the US EPA, and work closely with the International Council for Local Environmental Initiatives, a UN-funded organization based in Toronto, to share our experiences with other cities that are moving on a path toward a sustainable future.

The Future

Review of Environmental Programs of Other City Agencies

Part of the commission's responsibility is to review the policies and practices of other city agencies for conformity with the sustainability plan. Four efforts are in the works:

Assessment of Actions Proposed in the Sustainability Plan: Sustainable San Francisco, a project of the Tides Center, has begun a project to assess which actions proposed in the sustainability plan are already underway by city agencies, and their progress. Volunteers are working closely with the Department of the Environment on this project.

Assessment of Environmental Functions and Program Performance: The mayor's office is currently working with the Municipal Fiscal Advisory Committee of the Mayor to make an assessment of the functions of a number of environmental city agencies. Depending on the outcome of this study,

there may be some reorganization of environmental functions within the city. This pro bono professional organization will also do a preliminary assessment of the progress of agencies on their environmental programs

Regular Environmental State of the City Report: Results of the assessments outlined above will go toward the first environmental state of the city report done under the auspices of the Department of the Environment. A first-ever report was published in 1994 under the auspices of the old Commission on San Francisco's Environment, an advisory committee to the Board of Supervisors. The Department of the Environment is charged in the charter with regularly producing such a report, which will provide hard data for the public and decision-makers on San Francisco's progress toward sustainability.

Weekly Environment Report: In the works is a regular weekly news briefing on the local environment.



Notes and Acknowledgements

¹ Gottfried, David A., ed., Passive Solar Design, *Sustainable Building Technical Manual* (Public Technology, Inc., 1996) p. IV-3.

² From the experience of San Francisco's Public Utilities Customer Service Bureau (which houses its water conservation programs).

³ Gottfried, David A., The Economics of Green Buildings, *Sustainable Building Technical Manual*, op. cit., p. I-1 – I-6.

⁴ Bernheim, Anthony, Indoor Air Quality, *Sustainable Building Technical Manual* op. cit., p. IV-61.

⁵ Gottfried, David A., Ellis A. Schoichet and Mitch Hart, Green Building Environmental Control: A Case Study, *HPAC Heating/Piping/Air Conditioning*, February, 1997, pp. 71-78.

⁶ Brown, Hillary, NYC Department of Design and Construction; Joyce Lee and Louise Woehrl; Towards High Performance Buildings: How NYC Could Capture Real Returns from More Energy and Resource Efficient Public Facilities, Paper delivered at November 1997 *Environmental and Economic Balance: The 21st Century Outlook* Conference, Miami Florida, p. 3.

⁷ Gottfried, The Economics of Green Buildings, loc. cit.

⁸ Holusha, John, For Office Towers, Being Green Can Be Beneficial, *The New York Times*, June 30, 1996, p. C/WR 9.

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